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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,724	09/30/2003	Vibhu Mittal	16113-1300001	2943

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EXAMINER

CHEN, TE Y

ART UNIT	PAPER NUMBER
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2161

NOTIFICATION DATE	DELIVERY MODE
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08/04/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

Office Action Summary	Application No.	Applicant(s)	
	10/676,724	MITTAL ET AL.	
	Examiner	Art Unit	
	SUSAN Y. CHEN	2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-21 and 46-62 is/are pending in the application.
- 4a) Of the above claim(s) 62 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-21 and 46-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06/15/2010</u> . | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/15/2010 has been entered.

Priority

It is noted that this application is a continuation-in-part of U.S. application No. 09/748,431, filed on Dec. 26, 2000, which claimed the priority of the provisional application No. 60/216,530, filed on Jul. 6, 2000. However, since some of the claimed subject matters such as: "a probabilistic dictionary", "a first format", "a second format", "parallel anchor text", etc. are not disclosed in the U.S. application 09/748,431 and the provisional application, as such, the claims including these subject matters are not consider to entitled to having the benefit of the earlier filing dates of the parent applications.

This office action is in response to the amendment filed on June 15, 2010.

Claims 14-21 and 46-62, are pending for examination; claims 14, 17-21, 46, 49-54 and 57-61 have been amended; claims 1-13 and 22-45 have been canceled; claims 62 is newly added.

Election/Restrictions

Newly submitted claim 62 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Claim 62 is dependent on a canceled and non-elected claim 1 by the election that was made **without** traverse as filed on May 25, 2006.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 62 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14-21 and 46-61, are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,724,593 issued to Hargrave et al. (hereinafter referred as Hargrave).

Claim 14:

Hargrave discloses the claimed search method [e.g., Abstract], comprising:

obtaining a search query including one or more terms, each term written in a first format from a user [e.g., col. 5, lines 10 – 22, the source to target language formatting in Fig. 6, col. 9, lines 66—67, col. 13, lines 24 – 30, the translation memory (TM) for computer assisted translation (e.g., col. 3, lines 1-2) which obtains a user search query entered at the step 903, Fig. 9 in a source language format];

translating the one or more terms of the query into a group of translated queries, each translated query having one or more terms in a second format using a probabilistic dictionary, the probabilistic dictionary mapping terms from the first format to the second format [e.g., the use of a stored particular language query term relevant n-gram dictionary listing with probabilistic weight calculated by steps as shown by Fig 1 and associated texts, the use of computer software to perform probabilistic dictionary language translation at col. 5, lines 22 – col. 8, lines 60, the software of Translation Memory (TM) system of Fig. 9 which encodes, converts and decodes the source query language in query input segment format into a translated query vector format (e.g., the steps 905-907, Fig. 9) or sorted target text segments format at the steps: 901-917 of Fig. 9 and associated texts];

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using a search engine to identify a plurality of documents responsive to the group of translated search queries [e.g., Unlike the conventional word search engine (e.g., col. 3, lines 1 – 13), the TM translator search engine used an aligned file (or aligned pairs file as shown by the unit: 403, Fig. 5) and a created inverted index table to identify a plurality of documents responsive to the group of translated search queries (e.g., col. 5, lines 10-22 & col. 11, lines 6 – 36 & Fig. 3) for quickly searching (i.e. finding and retrieving) for all text segments in the aligned pair file (e.g., 403, Fig. 5) similar to the text of one or more translated queries (col. 13, lines 7 – 19, Fig. 9 and associated texts). Wherein, each of the aligned pairs in the aligned pairs file together with an indication of the size of each source language text segments and target language text segments documents . The segment size information allows more rapid sequential access to the content of the aligned files pair (e.g., col. 12, lines 32-37). In addition, the use of inverted index file (e.g., 409, Fig. 8), a post vector file (e.g., the unit: 405, Fig. 4), a correlation file (e.g., the unit: 407, Fig. 4) and a aligned pairs file (e.g., the unit: 403, Fig. 5) by the TM search engine to conduct the index searching clearly identified a plurality of documents responsive to the group of translated search queries (e.g., col. 12, lines 24 – col. 13, lines 19, Fig. 9 and associated texts)]; and

returning search results written in the second format to the user, the search results referencing one or more of the identified documents [e.g., per the use of index file (e.g., 409, Fig. 8, col. 13, lines 31-58) & col. 14, lines 20 – 24, Fig. 9 and associated texts].

Claim 15:

Except the limitations recited in claim 14, Hargrave further discloses:

obtaining search result selections from the user [e.g., the steps: 903-907, Fig. 9 and associated texts];

using said search result selections to modify the probabilistic dictionary of term mappings [e.g., col. 13, lines 20 – 57, the steps: 903-913, Fig. 9 and associated texts].

Claim 16:

Except the limitations recited in claim 15, Hargrave further discloses the modification comprises adjusting at least one probability associated with at least one mapping in the probabilistic dictionary [e.g., col. 5, lines 1-9, Fig. 9 and associated texts].

Claim 17:

Except the limitations recited in claim 14, Hargrave further discloses where translating the query into the second format includes expanding the search query [e.g., the adding and linking back schema at col. 12, lines 26- col. 13, lines 6, col. 13, lines 41 – col. 14, lines 8].

Claim 18:

Except the limitations recited in claim 17, Hargrave further discloses the expanded query includes alternative encodings of the search query terms [e.g., col. 14, lines 1-16].

Claim 19:

Except the limitations recited in claim 17, Hargrave further discloses the expanded query includes alternative language translations of the search query terms [e.g., col. 14, lines 16-17].

Claim 20:

Except the limitations recited in claim 17, Hargrave further discloses the expanded search query includes alternative encodings and alternative language translations of the search query terms [e.g., col. 14, lines 1-17].

Claim 21:

Except the limitations recited in claim 18, Hargrave further disclose the expanded search query includes synonyms of the alternative encodings of the search query terms [e.g., col. 2, lines 38-67, col. 14, lines 1-17].

As to claims 46 – 61, these claims recite similar features as claims 14 – 21 in form of computer system and storage medium encoded with a computer program, hence are rejected for the same reason.

Response to Arguments

Applicant's arguments filed on June 15, 2010 have been fully considered but they are not persuasive.

The examiner disagrees with applicant's arguments and piece-meal interpretation of the prior art of Hargrave.

Applicant argued that "Hargrave does not describe, using a search engine to identify a plurality of documents responsive to the group of translated search queries, as recited by amended claim 14."

In respond to above arguments, the examiner directs applicant attention to the following excerpts and Figures disclosed by Hargrave:

For example, Hargrave clearly disclosed his Translation Memory (TM) computing system as following:

"A translation memory for computer assisted translation based upon an aligned file having a number of source language text strings paired with target language text strings. A posting vector file includes a posting vector associated with each source language text string in the aligned file. Each posting vector includes a document identification number corresponding to a selected one of the source language text strings in the aligned file and a number of entropy weight values, each of the number of weight values corresponding to a unique letter n-gram that appears in the selected source language text string. Preferably, the translation memory further includes an inverted index comprising a listing of source language letter n-grams and a pointer to each of the posting vectors including an entry for the listed letter n-gram." (Abstract)

Hargrave further disclosed to resolve the fuzzy search difficulties in a conventional word search engine (e.g., col. 3, lines 1 – 13), the his invention is **“translation tools that are inherently language independent. Differential weighting of novel text segments provides an ability to fuzzy match words, phases, as well as full sentences and multiple sentence documents. Fuzzy matching permits effective fuzzy concordance searching on sub-strings within sentences.”** (col. 3, lines 39 – 45)

In addition, Hargrave clearly disclosed that **“In accordance with the present invention, the heart of the TM is an “aligned file” comprising a source language file that is broken into a plurality of text segments. Each text segment may be a word, group of words, phrase, sentence, or the like. Each source language text segment is associated or aligned with a translated text segment in a target language. Many of the operations described below are performed only on the text strings in the source language file. However, it should be remembered throughout the discussion that each source language text segment is associated with a translated text segment in the aligned file thereby allowing searches of the source language text segments to produce translated text segments also.”** (Col. 5, lines 10 – 22)

As set forth above, Hargrave clearly disclosed his TM computer assisted search engine, used an aligned file (e.g., Abstract & aligned pairs file 403, Fig. 5) to perform the claimed searching.

Hargrave further clearly disclosed his system included a created inverted index file (e.g., Abstract & col. 11, lines 37 at seq., Fig. 3 and associated texts), wherein, **“the stored inverted index file includes, for each n-gram, a pointer to a unique posting vector in a posting vector file. The posting vector file contains a posting vector for each n-gram in the index. Each posting vector comprises a list of document identifications where each document identification is associated with the normalized weight for the selected n-gram in the selected**

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document. Each posting vector is located at a unique address in the translation memory, and the inverted index makes reference to these unique addresses. This is accomplished in step 309 by adding the unique address corresponding to the posting vector to the index file.” (col. 11, lines 66 – col. 12, lines 10)

As set forth above, in contrary to applicant's arguments, Hargrave clearly disclosed the claimed TM search engine [e.g., 400, Fig. 4 & Fig. 9] which uses a inverted index file (e.g., 409, Fig. 8, col. 12, lines 56 - col. 13, lines 6), a post vector file (e.g., the unit: 405, Fig. 4 and col. 12, lines 38-49), a correlation file (e.g., the unit: 407, Fig. 4, col. 12, lines 50-55) and a aligned pairs file (e.g., the unit: 403, Fig. 5, col. 12, lines 32 - 37) to conduct an index searching and identifying a plurality of documents as claimed in responsive to the group of translated search queries (e.g., col. 12, lines 24 – col. 13, lines 19 & Fig. 9 and associated texts) for a quick language independent translation, searching, retrieving and returns sorted results to a user.

As to the rest of arguments which merely rehashed issues addressed on record.

Based on the discussion above, because applicant does not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references and rejections, therefore, it is believed that the rejections on record should be sustained.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Liu et al. (U.S. Patent No. 7,283,992), which disclosed media agent to suggest contextually related media content.

Points of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUSAN Y. CHEN whose telephone number is (571)272-4016. The examiner can normally be reached on Monday - Friday from 7:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mofiz Apu can be reached on 571-272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Susan Y Chen/
Primary Examiner
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July 27, 2010